

EDUCATION AND PROFESSIONAL EXPERIENCE RESEARCH INTERESTS
TEACHING EXPERIENCE AND OTHER PROFESSIONAL ACTIVITIES



Anatolij K. Prykarpatski

Ph.D., Dr. of Sci., professor habilitated in mathematics and physics

CURRICULUM VITAE

Name: Prykarpatski

First name: Anatolij

Gender: Male

Birthdate: October 07, 1953

Town: Boryslav of Lviv region

Citizenship: Poland

Preferred languages: English, mediocry Francais and German

Professional email: pryk.anat@cybergal.com

Private email: pryk.anat@cybergal.com

AFFILIATION:

The Department of Computer Science and Telecommunication

at the Cracov University of Technology, Krakow, Poland

position: *Formerly: Holder of the **Differential Equations and Functional Analysis Chair, Distinguished Professor of Mathematical Physics***

title: *Professor of Mathematical Physics - (1995 - nominated by the Ministry of Education and Science of Ukraine, Kyiv, Ukraine; 2002 - nominated by the Ministry of Education, Warsaw, Poland*

EDUCATION

Student: (1970-1975)- the **Ivan Franko Lviv State University**, the Physics Department, 1 Universytetska Str., Lviv city, 79000 Ukraine (Master Degree)

Graduate Student : (1977-1980)- the **Dept. of Mathematical Physics at the Institute of Mathematics of the National Academy of Sciences** of Ukraine, 3 Tereshchenkivska Str., Kyiv 01601 UkrSSR- **Ph.D. in Differential Equations and Mathematics and Physics**, 30.10.1980 :Thesis: "*The integrability investigation of the ordinary Riccati and some partial differential equations of mathematical physics*")

Doctor of Mathematics and Physics Habilitation: Thesis: "*Investigation of nonlinear dynamical systems of statistical and mathematical physics by functional-operator methods*"; 17.06.1987- at the **Laboratory of Theoretical Physics of the Joint Institute for Nuclear Research**, Dubna, Moscow region, 141980, Russia, USSR

1 PROFESSIONAL EXPERIENCE

Visiting Professor: (2019, Spring Semestr) - Dept. of Mathematical Sciences at the New Jersey Institute of Technology of Newark NJ, USA

Visiting Professor: (2019, Spring Semestr) - Rutgers University, New Brunswick NJ, USA

Visiting Professor: (2017, Summer Semestr) - Dept. of Mathematical Sciences at the New Jersey Institute of Technology of Newark, NJ USA

Visiting Professor: (2015, Summer Semestr) -Dept. of Mathematical Sciences at the New Jersey Institute of Technology of Newark, NJ USA

Visiting Professor: (2015, May-June) - Department of Physics at the Massachusetts Institute of Technology (MIT), Boston, MA, USA

Visiting Professor: (2015, Spring Semestr) - the Mathematics Department at the Hacettepe University of Ankara, Turkey

Visiting Professor: (2013, Spring Semestr) - the Mathematics and Physics Departments of the Hacettepe University of Ankara, Turkey

Visiting Professor: (2010, Spring Semestr)- the Mathematics, Physics Departments of Turku University, Turku, Finland

Visiting Professor: (2008, Spring Semestr)- the International Center of Theoretical Physics, Trieste, Italy

Visiting Professor: (2007, Fall Semestr)- Scuola Internazionale Superiore di Studi Avanzati di Trieste, Trieste, Italy

Visiting Professor: (1997, Spring Semestr)- New Jersey Institute of Technology, Newark, NJ, USA

Visiting Professor: (1996, Fall Semestr)- *Physics Department*, Czech Technical University in Prague, Czech Republic

Visiting Professor: (1993-1996)- New Jersey Institute of Technology, Newark, NJ, USA

Visiting Professor: (1993, Summer Semestr)- NATO Institute for Advanced Studies, Montreal University, Montreal, Canada

2 RESEARCH INTERESTS

I. Applied Mathematics and Mathematical Physics

II. Mathematics in Computer Science and Applications

3 TEACHING EXPERIENCE/RELEVANT COURSES

I. Mathematics and its Applications:

differential-geometric and algebraic methods
operator and spectral theory
inverse scattering spectral transform
ergodic theory and stochastic processes
quantum mathematics methods and applications
quantum signal transmission and informatics
nonlinear analysis and mathematical economy
approximation theory and numerical algorithms
computer-algebra algorithms of symbolic calculations
integrable dynamical systems theory
nonlinear functional analysis
quantum computer algorithms
neural replicator circuits
algebraic backgrounds to cryptography

II. Mathematical and Theoretical Physics:

Lagrangian and Hamiltonian mechanics
classical and quantum electrodynamics
relativity theory, string theory and gravity
classical and quantum statistical physics and kinetic theory
quantum scattering theory
quantization problems in quantum mechanics and applications
quantum nonlinear optics
quantum Josephson type media
polaron theory
magnetohydrodynamics of plasma physics
hydrodynamics and turbulence theory
vortex theory aspects in magneto-dynamics
ergodic processes and dynamical chaos
solvable models of quantum statistical physics and fields theory

Speciality courses:

Methods of mathematical physics
Statistical physics, classical and quantum
Classical and quantum electrodynamics
Mathematical theory of hydrodynamics
Magnetohydrodynamics and kinetic plasma theory
Electricity and Magnetism
Quantum mathematical physics
Vortex theory and applications
Statistical physics
Quantum nonlinear optics
Dynamical systems theory
Ergodic theory
Nonlinear functional analysis
Spectral theory
Operator theory
Theory of distributions
Differential geometry
Mathematical analysis
Analysis on manifolds
Linear algebra
Analytical geometry
Analytical mechanics
Lie groups and Lie algebras
Probability and stochastic processes
Methods of financial mathematics
Introduction to cryptography
Mathematical programming
Game theory
Optimal control theory and applications

4 RESEARCH ADVISING ACTIVITY

a) Graduate students advised for receiving Ph.D. degree:

Golenia J. (Krakow, Poland, 2004)
 Luśtyk M. (Kraków, Poland, 2010)
 Shoom A. (Poland, 2002)
 Drobovska I.S. (Ukraine, 1994)
 Samulyak R.V. (Ukraine, 1995; USA, 2002)
 Hentosh O.Y.(Ukraine, 1998)
 Kopych M.I.(Ukraine, 2000)
 Samoilenko V.H. (Ukraine, 1982)
 Sydorenko Yu.M. (Russia, 1989),
 Mykytyuk I.V. (Russia 1985)
 Kuybida V.S. (Ukraine 1992)
 Fil B.M. (Ukraine, 1988)

b) A list of joint researchers for the past years:

Balinsky A. (United Kingdom)
 Strampp W. (Germany)
 Blackmore D.L. (USA)

5 OTHER INTERESTS AND SKILLS

Language: Fluent in Polish, Ukrainian and Russian; Proficient in English, working knowledge of Francais, German and Czech

Hobbies: Swimming, Mountains, Ancient history

HONORS, AWARDS

- 1) Diploma of the NAS in Mathematical Physics, Kyiv- 1982
- 2) Ostrovsky Republican Award in Science and Technology- 1984, NAS, Kyiv, Ukraine
- 3) The Silver Order "For the Service" honored by the President of Polish Republic - 2003
- 4) The Diploma of the Western Scientific Centre of NAS of Ukraine -2003
- 5) The International "N. Bogolubov Award in Statistical and Mathematical Physics" of the National Academy of Science of Ukraine - 2009
6. The "State Prize in Science and Technology of Ukraine2019

6 RELEVANT PUBLICATIONS

Monographs:

1. A. K. Prykarpatski. *Integrable Dynamical Systems: differential-geometric and spectral aspects* (monograph), Kiev, Naukova Dumka, 1987
2. A. K. Prykarpatski. *Algebraic aspects of Nonlinear Dynamical Systems on Manifolds* (monograph), Kiev, Naukova Dumka, 1991
3. A. K. Prykarpatski. *Algebraic integrability of nonlinear dynamical systems on manifolds: classical and quantum aspects.*(monograph) 1998, Kluwer Publishers, Dordrecht, the Netherlands
4. A. K. Prykarpatski. *Quantum Field Theory with Application to Quantum Nonlinear Optics*, World Scientific Publishers, 2002, New Jersey, USA
5. A. K. Prykarpatski. *Differential-geometric and Lie-algebraic backgrounds of nonlinear integrable dynamical systems on functional manifolds*, Second Edition, Lviv University Publisher, 2006, Lviv, Ukraine
6. A. K. Prykarpatski. *Non linear dynamical systems of mathematical physics: spectral and differential geometrical integrability analysis.* (monograph) World Scientific Publ., NJ, USA, 2011)

Articles:

1. A. K. Prykarpatski. THE QUANTUM FERMIONIC CHARGED PARTICLE SELF-INTERACTION PROBLEM WITHIN THE FOCK MULTITIME AND FEYNMAN PROPER TIME PARADIGMS. Ukr. J. Phys. 2017. Vol. 62, No. 2, p. 172-183
2. A. K. Prykarpatski. The Quantum Charged Particle Self-Interaction Problem within the Fock Many Temporal and Feynman Proper Time Paradigms. Physics of Particles and Nuclei Letters, 2017, Vol. 14, No. 1, pp. 87–101 (with N. Bogolubov)
3. A. K. Prykarpatski. Poisson brackets, Novikov-Leibniz structures and integrable Riemann hydrodynamic systems. Journal of Nonlinear Mathematical Physics, Vol. 24, No. 1 (2017) 41–72, (with Orest D. Artemovych, Denis Blackmore)
4. A. K. Prykarpatski. HAMILTONIAN OPERATORS AND RELATED INTEGRABLE DIFFERENTIAL-ALGEBRAIC NOVIKOV-LEIBNIZ TYPE STRUCTURES. Asian Journal of Mathematics and Computer Research, 17(4): 184-203, 2017 (with Orest D. Artemovych, Denis Blackmore)
5. A. K. Prykarpatski. Long-time behavior of solutions and chaos in reaction-diffusion equations. Chaos, Solitons and Fractals 99 (2017) p. 91–100 (with D. Blackmore, K. Soltanov)
6. Anatolij K. Prykarpatski. Lie-algebraic structure of Lax–Sato integrable heavenly equations and the Lagrange–d’Alembert principle. Journal of Geometry and Physics 120 (2017) p. 208–227D. (with O. Hentosh, Ya. Prykarpatsky, D. Blackmore)
7. Anatolij K. Prykarpatski, Hamilton Operators and Related Integrable Differential Algebraic Novikov–Leibniz Type Structures Trends in Mathematics, 87–94 in: 2018 Springer International Publishing Geometric Methods in Physics, XXXV Workshop 2016
8. A. K. Prykarpatski and N. N. Bogolubov (Jr.) The Quantum Charged Particle Self-Interaction Problem within the Fock Many Temporal and Feynman Proper Time Paradigms. Physics of Particles and Nuclei Letters, 2017, Vol. 14, No. 1, pp. 87–101.
9. A. K. Prykarpatski. THE QUANTUM FERMIONIC CHARGED PARTICLE SELF-INTERACTION PROBLEM WITHIN THE FOCK MULTITIME AND FEYNMAN PROPER TIME PARADIGMS Ukr. J. Phys. 2017. Vol. 62, No. 2, p. 172-183
10. Asian Journal of Mathematics and Computer Research, 17(4): 184-203, HAMILTONIAN OPERATORS AND RELATED INTEGRABLE DIFFERENTIAL-ALGEBRAIC NOVIKOV-LEIBNIZ TYPE STRUCTURES (by : OREST D. ARTEMOVYCH1, DENIS BLACKMORE, AND ANATOLIJ K. PRYKARPATSKI)
11. Journal of Nonlinear Mathematical Physics, Vol. 24, No. 1 (2017) 41–72 Poisson brackets, Novikov-Leibniz structures and integrable Riemann hydrodynamic systems (by: Orest D. Artemovych, Denis Blackmore and Anatolij K. Prykarpatski)
12. Journal of Geometry and Physics 120 (2017) 208–227, Lie-algebraic structure of Lax–Sato integrable heavenly equations and the Lagrange–d’Alembert principle (by: Oksana E. Hentosh a, Yarema A. Prykarpatsky, Denis Blackmore, Anatolij K. Prykarpatski)
13. Mathematics 2017, 5, 75, Geometric Structure of the Classical Lagrange-d’Alambert Principle and its Application to Integrable Nonlinear Dynamical Systems (Anatolij K. Prykarpatski, Oksana E. Hentosh and Yarema A. Prykarpatsky)
14. Physics of Particles and Nuclei Letters, 2017, Vol. 14, No. 1, pp. 87–101, The Quantum Charged Particle Self-Interaction Problem within the Fock Many Temporal and Feynman Proper Time Paradigms (by : A. K. Prykarpatski and N. N. Bogolubov (Jr.)
15. Ukr. J. Phys. 2017. Vol. 62, No. 2, p.173-183, THE QUANTUM FERMIONIC CHARGED PARTICLE SELF-INTERACTION PROBLEM WITHIN THE FOCK MULTITIME AND FEYNMAN PROPER TIME PARADIGMS (by: A.K. PRYKARPATSKI)
16. Chaos, Solitons and Fractals 99 (2017) 91–100 , Long-time behavior of solutions and chaos in reaction-diffusion equations (by: Kamal N. Soltanov, AnatolijK. Prykarpatski and Denis Blackmore)
17. Journal of Generalized Lie Theory and Applications, Generalized Lie Theory and Applications, The Novel Lie-Algebraic Approach to Studying Integrable Heavenly Type Multi-Dimensional Dynamical Systems (by: Blackmore D, Hentosh EO and Prykarpatski)

18. 194. Mathematics 2017, 5, 75; doi:10.3390/math5040075, "Geometric Structure of the Classical Lagrange-d'Alembert Principle and Its Application to Integrable Nonlinear Dynamical Systems"(by: Anatolij K. Prykarpatski, Oksana E. Hentosh and Yarema A. Prykarpatsky)
19. Geometric Methods in Physics. XXXV Workshop 2016, Trends in Mathematics, 87–94, 2018 Springer International Publishing, Hamilton Operators and Related Integrable Differential Algebraic Novikov–Leibniz Type Structures (by: Anatolij K. Prykarpatski)
20. Commun Nonlinear Sci Numer Simulat 64 (2018) 256–268, New integrable differential-difference and fractional nonlinear dynamical systems and their algebro-analytical properties (by: Anatolij Prykarpatski)
21. Journal of Geometry and Physics 134 (2018) 77–83, Journal of Geometry and Physics, On the solutions to the Witten–Dijkgraaf–Verlinde–Verlinde associativity equations and their algebraic properties (by: Anatolij K. Prykarpatski)
22. Journal of Mathematical Sciences, Vol. 231, No. 6, June, 2018, p. 779-826,, A DISCRETE NONLINEAR SCHRÖDINGER-TYPE HIERARCHY, ITS FINITE-DIMENSIONAL REDUCTION ANALYSIS, AND THE NUMERICAL INTEGRATION SCHEME (by: A. K. Prykarpatski and J. L. Cieślinski)
23. Journal of Mathematical Sciences and Modelling, 1 (1) (2018) 1-9, Generalized Lie-algebraic structures related to integrable dispersionless dynamical systems and their application (by: Oksana E. Hentosh, Yarema A. Prykarpatsky, Denis Blackmore and Anatolij Prykarpatski)
24. Chaotic Modeling and Simulation (CMSIM) 3: 369-376, 2018, Generalized multidimensional Boole type transformations, their discretization and ergodicity (by: Anatolij K. Prykarpatski)
25. Nonlinear Systems and Their Remarkable Mathematical Structures, Norbert Euler (editor), July 3, 2018, p.187-207, Pfeiffer-Sato solutions of Buhl's problem and a Lagrange-d'Alembert principle for Heavenly equations (by: Oksana E Hentosh, Yarema A Prykarpatsky, Denis Blackmore and Anatolij Prykarpatski)
26. Miskolc Mathematical Notes, Vol. 19 (2018), No. 1, pp. 555–567, A NOVEL INTEGRABILITY ANALYSIS OF A GENERALIZED RIEMANN TYPE HYDRODYNAMIC HIERARCHY (by: ANATOLIY M. SAMOILENKO, YAREMA A. PRYKARPATSKYY, DENIS BLACKMORE, AND ANATOLIY K. PRYKARPATSKI)
27. Symmetry, Integrability and Geometry: Methods and Applications SIGMA 14 (2018), 027, 15 pages, On the Linearization Covering Technique and its Application to Integrable Nonlinear Differential (by: Anatolij K. PRYKARPATSKI)
28. Set-Valued Mathematics and Applications, Vol. 1 (2017), ISSN: 0973-7375, Versal deformations of affine vector fields on torus (by: Denis Blackmore and others)
29. Poisson brackets, Novikov-Leibniz structures and integrable Riemann hydrodynamic systems, Journal of Nonlinear Mathematical Physics, Vol. 24, No. 1 (2017) 41–72 (with Orest D. Artemovych)
30. Long-time behavior of solutions and chaos in reaction-diffusion equations, Chaos, Solitons and Fractals 99 (2017) 91–100 (with Kamal N. Soltanov and others)
31. Examples of Lie and Balinsky-Novikov algebras related to Hamiltonian operators, Topol. Algebra Appl. 2018; 6:43–52, (by: Orest D. Artemovych and others)
32. Matematychni Studii, 2018, V.48, No.2, p.124-133, THE Pfeiffer-Lax-Sato type vector field equations and the related integrable versal deformations (by: D. Blackmore and others)
33. Journal of Mathematical Sciences and Modelling, 1 (1) (2018) 1-9: www.dergipark.gov.tr/jmsm, "Generalized Lie-algebraic structures related to integrable dispersionless dynamical systems and their application"(by Oksana E. Hentosh and others)
34. In: a book: "Nonlinear Systems and Their Remarkable Mathematical Structures" Norbert Euler (editor), July 3, 2018: "Pfeiffer-Sato solutions of Buhl's problem and a Lagrange-d'Alembert principle for Heavenly equations"(by Oksana E Hentosh and others)
35. Applied Mathematics Letters 88 (2019) 41–49; www.elsevier.com/locate/aml "New fractional nonlinear integrable Hamiltonian systems" (by Oksana Ye. Hentosh and others)

36. "On the solutions to the Witten–Dijkgraaf–Verlinde–Verlinde associativity equations and their algebraic properties", *Journal of Geometry and Physics* 134 (2018) 77–83; journal homepage: www.elsevier.com/locate/geomphys, (by Anatolij K. Prykarpatski)
37. "A novel integrability analysis of a generalized Riemann type hydrodynamic hierarchy", *Miskolc Mathematical Notes* Vol. 19 (2018), No. 1, pp. 555–567 DOI: 10.18514/MMN.2018.2338 (by A.M. Samoilenko, Y.A. Prykarpatsky, D. Blackmore and A.K. Prykarpatski)
38. A discrete nonlinear Schrodinger type hierarchy, its finite-dimensional reduction analysis and numerical integration scheme, *Journal of Mathematical Sciences*, Vol. 231, No. 6, June, 2018 (with J. Cieřliński)
39. New integrable differential-difference and fractional nonlinear dynamical systems and their algebro-analytical properties, *Commun Nonlinear Sci Numer Simulat* 64 (2018) 256–268, (by: Anatolij Prykarpatski)
40. On the solutions to the Witten–Dijkgraaf–Verlinde–Verlinde associativity equations and their algebraic properties, *Journal of Geometry and Physics* 134 (2018) 77–83 (by: Anatolij K. Prykarpatski)
41. "Examples of Lie and Balinsky-Novikov algebras related to Hamiltonian operators", *Topol. Algebra Appl.* 2018; 6:43–52; (by: Orest D. Artemovych, Anatolij K. Prykarpatski, and Denis L. Blackmore)
42. Linearization Covering Technique and its Application to Integrable Nonlinear Differential Systems, Symmetry, Integrability and Geometry: Methods and Applications, *SIGMA* 14 (2018), 02, 15 pages, "On the (by: Anatolij K. Prykarpatski)
43. "Generalized multidimensional Boole type transformations, their discretization and ergodicity, *Chaotic Modeling and Simulation*, CMSIM 3: 369-376, 2018; (by: Anatolij K. Prykarpatski)
44. Theory of Multidimensional Delsarte–Lions Transmutation Operators. I, *Ukrainian Mathematical Journal*, 2019, Volume 70, Issue 12, pp 1913–1952
45. Theory of Multidimensional Delsarte–Lions Transmutation Operators. II, *Ukrainian Mathematical Journal*, 2019, Volume 71, Issue 2, pp 345—361 (with A.M. Samoilenko and others)
46. Ergodic deformations of nonlinear Hamilton systems and local homeomorphism of metric spaces, *Journal of Mathematical Sciences*, 2019, Vol. 241, No.1, p. 27-35 (with T. Banakh)
47. Quantum Current Algebra Symmetries and Integrable Many-Particle Schrodinger Type Quantum Hamiltonian Operators, *Symmetry*, 2019, 11, 975; doi:10.3390/sym11080975 (with Dominik Prorok)
48. New fractional nonlinear integrable Hamiltonian systems, *Applied Mathematics Letters* 88 (2019) 41–49, (with Oksana Ye. Hentosh and others)
49. Non-associative structures of commutative algebras related with quadratic Poisson brackets. *European Journal of Mathematics*, 2020, <https://doi.org/10.1007/s40879-020-00398-w>
50. On symmetry analysis of differential systems on functional manifolds. *J. Mathem. Analysis. Appl.* 490(2020)124326
51. Integrability Aspects of the Current Algebra Representation and the Factorized Quantum Nonlinear Schrödinger Type Dynamical Systems. *Physics of Particles and Nuclei*, 2020, Vol. 51, No. 4, pp. 434–442. © Pleiades Publishing, Ltd., 2020. (jointly with: N. N. Bogolubov, Jr. and D. Prorok)
52. Solvability, Completeness and Computational Analysis of a Perturbed Control Problem with Delays. *Mathematics and Statistics* 8(2): 187-200, 2020, <http://www.hrpub.org>; (with: Ludwik Byszewski, Denis Blackmore, Alexander A. Balinsky and Mirosław Lustyk)
53. Poisson structures on (non)associative noncommutative algebras and integrable Kontsevich type Hamiltonian systems. *Ann Math Phys* 3(1): 001-006. <https://dx.doi.org/10.17352/amp.000010> (with: Oksana E Hentosh, Alexander A Balinsky)
54. Hamiltonian operators and related differential-algebraic Balinsky-Novikov, Riemann and Leibniz type structures on nonassociative noncommutative algebras. *Proceedings of the International Geometry Center*, Vol. 12, no. 4 (2019) pp. 1–49, (with: Orest D.

Artemovych, Alexander A. Balinsky)

55. The generalized centrally extended Lie algebraic structures and related integrable heavenly equations. Carpathian Math. Publ. 2020, 1 (1), 242–264, doi:10.15330/cmp.1.1.242-264 (with: Hentosh O, Ye., Balinsky A.A.)

56. Non-associative structures of commutative algebras related with quadratic Poisson brackets. European Journal of Mathematics (2020) 6:208–231; <https://doi.org/10.1007/s40879-020-00398-w>. (with: Orest D. Artemovych, Denis Blackmore)

57. Many-Particle Schrödinger Type Finitely Factorized Quantum Hamiltonian Systems and Their Integrability. In: Kielanowski P., Odziejewicz A., Previato E. (eds) Geometric Methods in Physics XXXVIII. Trends in Mathematics. Birkhauser, Cham.(2020); https://doi.org/10.1007/978-3-030-53305-2_16 (with: D. Prorok)

6.1 AFFILIATIONS AND OTHER PROFESSIONAL ACTIVITIES

Reviewer: Zentralblatt, AMS; **Member:** AMS, SIAM, Scientific Society of Open Systems, Torun, Poland, Mathematical Section of the NTSh Society in Lviv

Editorial Board: *"Nonlinear Oscillations" Journal*, *"The Universal Journal of Physics and Application"*, *"Boson Journal of Physics"*, *"High Energy Physics"*, *"American Journal of Physical Sciences"*, *"Particle Physics Journal"*, *"Applied Mathematics" Journal etc.*

7 PARTICIPATION FOR CONGRESSES AND CONFERENCES:

2019 - XXXVIII Workshop on Geometric Methods in Physics, VIII School on Geometry and Physics , 30.06-6.07.2019, 24-28.06.2019, Report: "Quantum Current Algebra Symmetries and Integrable Many-Particle Schredinger Type Quantum Hamiltonian Operators"

2019 - International 121st Statistical Mechanics Conference at Rutgers University, Busch Campus, Hill Center, Room 114, Sunday, May 12, 2019 - Tuesday May 14, 2019, USA

2018 - 8th International Conference on "Mathematical Analysis, Differential Equation & Applications - MADEA 8"held on June 17-23, 2018 in Cholpon-Ata (Issyk-Kul), Kyrgyz Republic, a member of the International Scientific Committee, <http://madea2018.manas.edu.kg/>

2018 - International Workshop on Analysis and PDE Leibniz Universität Hannover, October 8 - 10, 2018, Germany; <https://www.math-conf.uni-hannover.de/anapde18.html>; Report: ON THE SOLUTIONS TO THE WITTEN DIJKGRAAF-VERLINDE-VERLINDE ASSOCIATIVITY EQUATIONS IN TOPOLOGICAL FIELD THEORY AND THEIR GEOMETRIC STRUCTURE

2018 - International scientific conference "Modern problems of mathematics and its application in natural sciences and information technologies", <http://fmi50.pp.ua/?i=1> Report: "On one mathematical problem posed by A.M. Samoilenko in theory of ergodic deformations of nonlinear Hamiltonian systems and their adiabatic invariants."

2018 - 8th International Conference on "Mathematical Analysis, Differential Equation & Applications - MADEA 8"held on June 17-23, 2018 in Cholpon-Ata (Issyk-Kul), KYRGYZ REPUBLIC, a member of the International Scientific Committee, <http://madea2018.manas.edu.kg/>

2017- the International Conference in Functional Analysis dedicated to the 125'th anniversary of Stefan Banach, held on 18 - 23 September, 2017 in Lviv, Ukraine

2017- Summer Semester Workshop at the Center for Mathematical Studies and Statistics of the NJIT, Newark NJ, USA

2017 - International Workshop "Nonlinearity and Geometry" held 20-23 January 2017 in Warsaw, Poland

2016- the International Conference in Topology and Applications dedicated to the 120'th anniversary of Kazimierz Kuratowski, held on 27 September-01 October, 2016 in Lviv, Ukraine

2016 - the International XXXV Workshop on Geometric Methods in Physics, held 26.06-2.07.2016 in Białowieża, Poland

2015 - SIAM Conference on Applications of Dynamical Systems, held May 17-21, 2015 in Snowbird, Utah, USA

2014 - International Conference "Integrable Ststems", held June 23-30 in Krakow, Poland

2013 - Internrtional 9th ISAAC Congress, held from August 5 to August 9, 2013 in Krakow, Poland

2013 - International Conference on Mathematical Physics held 04.06.13-14.06.13 in Sophus Lie Center of Nordfjordeil, Norway

2012 - 5-th Chaotic Modeling and Simulation International Conference, 12 – 15 June 2012, Athens Greece

2012 - Fourth Conference "Statistical Physics: Modern Trends and Applications", held on July 3-6, 2012 in Lviv, Ukraine

2012 - International Conference dedicated to 120-th anniversary of Stefan Banach, held on September 17–21, 2012, in Lviv, Ukraine

2012 - The Polish Mathematical Conference in Applied Mathematics, held 03-10 September in Zakopane, Poland

2012 - The VI European Congress of Mathematics, held 03-10 July 2012 in Krakow, Poland

2011 - The VI-International Symposium "Integrable dynamical systems", held in Zielona Góra, Poland, on 29-31 May, 2011

2010 - The International Conference on Coherent and Nonlinear Optics (ICONO- 2010) held on 23-27 August 2010, Kazan, Russia

2010 - The Fifth International Workshop "RNAOPM'2010", held in Lutsk-Shatsk Lakes, Ukraine, 01-05 June, 2010

2010 - The All-Ukrainian Seminar "Problems of Probability and Mathematical Analysis" held 25-28 March 2010 in Vorokhta, Ivano-Frankivsk region, Ukraine

2010 -The Thirteen International M. Kravchuk Conference, held in May 13-15, 2010, Kyiv, Ukraine

2009- The XVI International Congress on Mathematical Physics held in Prague, Czech Republic, 3-8.08. 2009

2009- The International Conference "Nonlinear Evolution Equations and Dynamical Systems"held on Sardinia, Italy, 16-23.05. 2009

2009- The International N. Bogolubov Conference "Statistical Physics: Modern Trends and Applications"held in Lviv, Ukraine, 23-25.06. 2009

2009- The International Conference "Symmetry in Nonlinear Mathematical Physics"held in Kyiv, Ukraine, 21-27.06. 2009

2009- The International Conference "Infinite Dimensional Analysis and Topology"held in Yaremcha, Ukraine, 27.05-1.06. 2009

2009- The Minisymposium "Układy Calkowalne"held in Poznan, Poland, 15-16.06. 2009

2009- The International Conference dedicated to the 100-th anniversary M.M. Bogolybov and to the 70-th anniversary of M.I. Nahnybida held in Chernivtsi, Ukraine, 8-13.06. 2009

2009- The 7 International ISAAC Congress held in Congress Imperial College of London, England,

2009- The International N. Bogolubov Conference "Modern Problems of Theoretical and Mathematical Physics"held in Kyiv, Ukraine, 15-18.09. 2009

2009- The centennial memorial Bogolubov Conference held in Moscow-Dubna, Russia, 21-26.08. 2009

2009- The 80th Annual Meeting of the International Association of Applied Mathematics and Mechanics (GAMM) held in Gdansk, Poland, 09-13 February 2009

2007- International conference “Nonlinear Evolution Equations and Dynamical Systems (NEEDS)”, held in Cala Bon Capy, L’Ametlla de Mar, (Tarragona, Spain), June 15th -June 24th, 2007

2007- The ISAAC International Conference, held in Ankara, Turkey, 13-18 August 2007

2007- International ICIAM 2007 Congress, held in Zurich, Switzerland July, 16 - 20, 2007

2007- International Conference on Topological Methods, Differential Equations and Dynamical Systems Dedicated to the 65th birthday of Professor Massimo Furi, held in Firenze, 13 - 16 June 2007

2007- International Topological Theory of Fixed and Periodic Points TTFPP 2007 held 22-28 July 2007 in Bedlewo, Poland

2007- International ICTP Research Program, held in Trieste, Italy, 15 April-16 June, 2007

2006- International SISSA Workshop on Mathematical Physics, held in Trieste, Italy, 15-30 February, 2006

2006- International conference on mathematical analysis and differential equations, held in Uzhgorod, 18-23 September, 2006, (Abstract: p. 167-168)

2006 - International GAMM Conference held in Berlin, 27-31 March, 2006, (Abstract: p. 558)

2005-XXIV Journees Arithmetique, held in Marcel, France, 4-8 juillet 2005

2005-XXXIV Conference in Applied Mathematics, Zakopane, Poland, 20-25 Sept. 2005

2005-ISDF, International Conference on Differential Equations, Special Functions and Applications. Munich, Germany, July25-30, 2005

2004- Bogoliubov International Conference on Theoretical and Mathematical Physics, Moscow, Dubna, 02-08 Sept. 2004, Russia

2004- 36th ROMP Symposium in Mathem Physics held in Torun, Poland, June 5-12, 2004

2004- The International GAMM Conference "Numerical Analysis in Quantum Chemistry« Christian-Albrechts-University of Kiel, Germany, June 28th to 30th, 2004

2004- Fourth International Congress on Mathematics in Industry, Eindhoven, Holland, Juny 22-28, 2004

2004- The Second European Congress on Mathematics, Stockholm, Sweden, July 02-09, 2004

2004- Matematyka w Naukach technicznych I Przyrodniczych, AGH-UW, November, Krynica, 2004

2003- Xith International Congress on Mathematical Physics, held in Lissabon, Portugalia, August 08-11, 2003

2003- Fifth International Conference "Symmetry-2003, held in Kiev, 23–29 June, 2003, Ukraine

2003- 12th International Workshop on Matrices and Statistics IWMS-03, held 29-31 August 2003, in Dortmund, Germany

2003- XIX GAMM-Seminar on High-dimensional problems, Leipzig, Germany, January 23-25, 2003

2003- Fourth International Algebraic Conference, Lviv, August 04-09 2003, Lviv, Ukraina

2003- International Silk road Conference, (International advisory committee member), Taszkent, 30 September – 03 October 2003, Uzbekistan

2003- Summer International Conference “SDS –Stochastic Dynamical Systems”, held in Sudak, Crimea, 2003, Ukraine

1998-Int. Conference on Modern Problems in Mathematics, Czerniwtsi, Ukraine, 15-19 June’1998

1998-SIAM Conference on Mechanics and Mathematics. Atlanta, USA, Aug.24-26'1998

1998- Intern. Kravchuk's Conference on Mathematics held in Kyiv, Kyiv Polytechnical University and Institute of Mathematics of the NAS, Ukraine, May 14-19" 1998

1998-Intern. Conference on Modern Problems in Mechanics and Mathematics, Lviv, Ukraine, May 26-29'1998

1998-International Conference "Bogoliubov's Readings: held in Uzhgorod, Ukraine, September14-19 '1998

1998-Fourth International Conference on Difference Equations and Applications, held in Poznan, Poland August 27-31'1998

1997- International Banach Centrum Conference on Differential Inclusions and Applications, held in Warsaw, Poland, September 22-29'1997

1997- SIAM Conference on Material Science, held in Philadelphia, Pa, USA, May 11-16'1997

1997- SIAM Conference on Applied Mathematics, held in Paolo Alto, Stamford, Ca, USA, July 14-19'1997

1997-International Conference "EQUADIFF'9"held in Brno, Czech Republic, August 24-28'97

1996-International Symposium "KDV'96"held in Amsterdam, the Netherland, July 8-14'96

1996- International Symposium on Mathematical Physics, December 3-6, 1996, Torun, Poland, and other local meetings worldwide

1995- a mini-symposium co-organizer for the Third International Congress on Industrial and Applied Mathematics, July 3-7, 1995,Hamburg, Germany

1994-International Congress of Mathematical Physics, July 18-23, 1994, Unesco-Sorbonna, Paris, France

1994-International Congress of Mathematicians, August 3-11, 1994, Zurich, Switzerland and other local meetings worldwide.